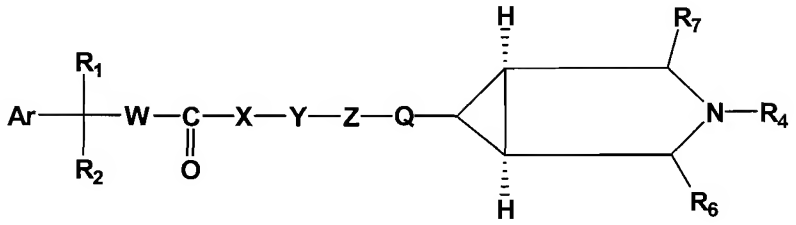
1. (Currently Amended) A compound having the structure of Formula I



Formula I

and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates, esters,~~ enantiomers, diastereomers, N-oxides, ~~polymorphs, prodrugs, metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl~~ ring ~~having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine or iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

W represents $(CH_2)_p$, where p represents 0 or 1;

X represents ~~oxygen, sulphur, nitrogen or~~ no atom;

Y represents ~~CHR5CO wherein R5 represents hydrogen or methyl or~~ $(CH_2)_q$ wherein q represents 0 ~~to 4~~;

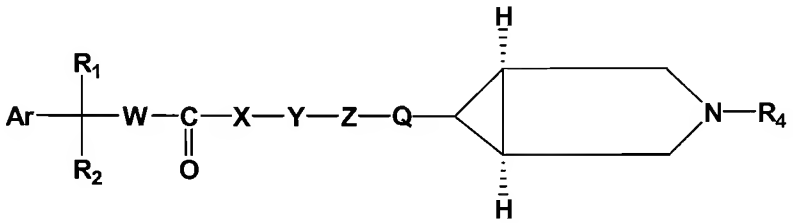
Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4);

R_6 and R_7 are independently selected from H, CH_3, COOH, $CONH_2$, NH_2 or CH_2NH_2; and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

2. (Currently Amended) The compound of claim 1, wherein the compound has the structure of Formula II,



Formula II

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, N-oxides, polymorphs, prodrugs, metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine or iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

W represents $(CH_2)_p$, where p represents 0 or 1;

X represents ~~oxygen, sulphur, nitrogen or~~ no atom;

Y represents ~~CHR5CO wherein R5 represents hydrogen or methyl or~~ $(CH_2)_q$ wherein q represents 0 ~~to 4~~;

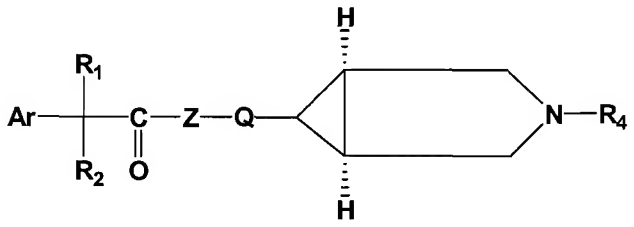
Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH , lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4); and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4),

lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

3. (Currently Amended) The compound of claim 1, wherein the compound has the structure of Formula III,



Formula III

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, N-oxides, polymorphs, prodrugs, metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine or iodine);

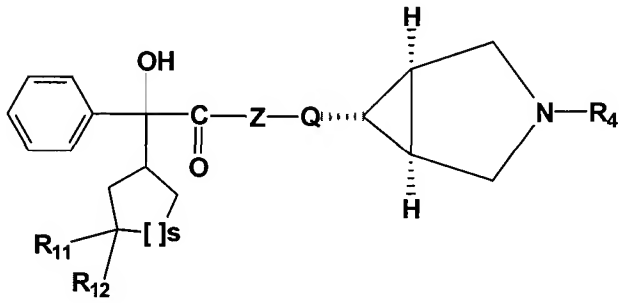
R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4); and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

4. (Currently Amended) The compound of claim 1, wherein the compound has the structure of Formula IV,



Formula IV

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, N-oxides, prodrugs or metabolites,~~ wherein R_{11} is hydrogen or fluoro, R_{12} is fluoro, amide or sulphonamide derivatives and s represents 1 to 2;

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected

from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4);

Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl; and

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH , lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4).

5. (Previously Amended) A compound selected from the group consisting of:

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S)-3,3-difluorocyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 1A)

(2R)-(1α,5α,6α)- N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S)-3,3-difluorocyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 1B)

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 2)

(2R or 2S)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S)-3,3-difluorocyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 3)

(2R or 2S)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-fluorocyclopentyl]-2-hydroxy-2-phenylacetamide (Compound No. 4)

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-phenylacetylamino cyclopentyl]-2-hydroxy-2-phenylacetamide (Compound No. 5)

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-(4-nitrophenyl) sulphonylaminocyclopentyl]-2-hydroxy-2-phenylacetamide (Compound No. 6)

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1Ror 1S, 3R or 3S)-3-phenylsulphonylamino cyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 7)

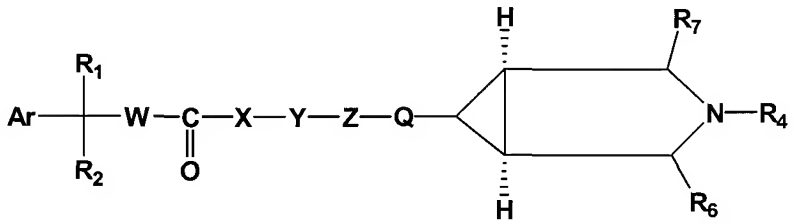
(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-benzyloxyacetylaminocyclopentyl]-2- hydroxy-2-phenylacetamide (Compound No. 8)

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-(4-methoxyphenyl) sulphonylaminocyclo pentyl]-2-hydroxy-2-phenylacetamide (Compound No. 9); and

(2R)-(1α,5α,6α)-N-[3-benzyl-3-azabicyclo[3.1.0]hexyl-6-(aminomethyl)-yl]-2-[(1R or 1S, 3R or 3S)-3-(4-bromophenyl)sulphonylamino cyclopentyl]-2-hydroxy-2-phenylacetamide (Compound No.10).

6. (Previously Amended) A pharmaceutical composition comprising a therapeutically effective amount of a compound of claim 1 together with pharmaceutically acceptable carriers, excipients or diluents.

7. (Currently Amended) A method for treatment ~~or prophylaxis~~ of an animal or human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is mediated through muscarinic receptors, and wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestinal hyperkinesis, the method comprising administering to said animal or human, a therapeutically effective amount of a compound having the structure of Formula I



Formula I

and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates, esters,~~ enantiomers, diastereomers, N-oxides, ~~polymorphs, prodrugs, or metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxyhydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine and iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

W represents $(CH_2)_p$, where p represents 0 to 1;

X represents ~~an oxygen, sulphur, nitrogen or~~ no atom;

Y represents ~~CHR_5CO wherein R_5 represents hydrogen or methyl or~~ $(CH_2)_q$ wherein q represents 0 ~~to 4~~;

Z represents oxygen, sulphur, NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

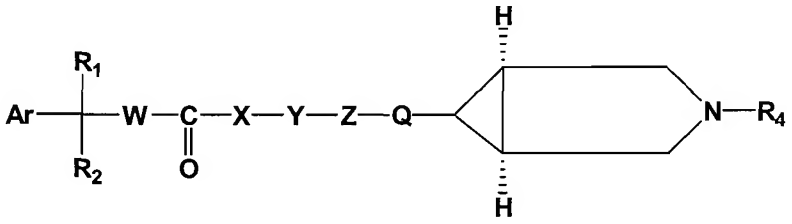
Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4);

R_6 and R_7 are independently selected from H, CH_3, COOH, $CONH_2$, NH_2 or CH_2NH_2; and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl,

hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

8. (Currently Amended) The method of claim 7, wherein the ~~for treatment or prophylaxis of an animal or human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is mediated through the muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of a~~ compound has the structure of Formula II,



Formula II

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, diastereomers, N-oxides, polymorphs, prodrugs, metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine or iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

W represents $(CH_2)_p$, where p represents 0 or 1;

X represents ~~oxygen, sulphur, nitrogen or~~ no atom;

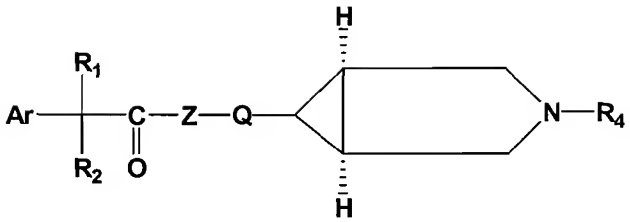
Y represents ~~CHR5CO wherein R5 represents hydrogen or methyl or~~ $(CH_2)_q$ wherein q represents 0 ~~to 4~~;

Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4); and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

9. (Currently Amended) The method of claim 7, ~~for treatment or prophylaxis of an animal or human suffering from a disease or disorder of the respiratory, urinary, and gastrointestinal systems, wherein the disease or disorder is mediated through the muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of a~~ wherein the compound has the structure of Formula III,



Formula III

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, distereomers, N-oxides, polymorphs, prodrugs, metabolites~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine or iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

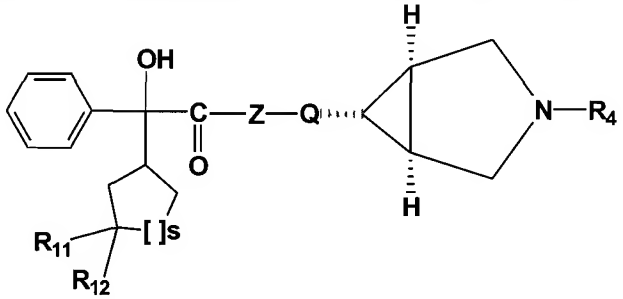
Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4); and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2

hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4).

10. (Currently Amended) The method of claim 7, wherein ~~for treatment or prophylaxis of an animal or human suffering from a disease or disorder of the respiratory, urinary or gastrointestinal systems, wherein the disease or disorder is mediated through the muscarinic receptors, comprising administering to said animal or human, a therapeutically effective amount of a~~ the compound has the structure of Formula IV,



Formula IV

~~and its pharmaceutically acceptable salts, pharmaceutically acceptable solvates, esters, enantiomers, N-oxides, prodrugs or metabolites,~~ wherein

R_{11} is hydrogen or fluoro, R_{12} is fluoro, amide or sulphonamide derivatives and s represents 1 to 2;

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4),

lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4);

Z represents oxygen, sulphur or NR_{10}, wherein R_{10} represents hydrogen or C_{1-6} alkyl; and

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4).

11. Currently Cancelled.

12. Previously Cancelled.

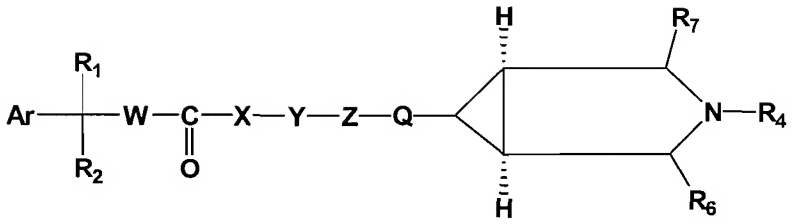
13. Previously Cancelled.

14. Previously Cancelled.

15. (Currently Amended) The method for treatment ~~or prophylaxis~~ of an animal or human suffering from a disease or disorder of the respiratory, urinary and gastrointestinal systems, wherein the disease or disorder is mediated through the muscarinic receptors, and wherein the disease or disorder is urinary incontinence, lower urinary tract symptoms (LUTS), bronchial asthma, chronic obstructive pulmonary disorders (COPD), pulmonary fibrosis, irritable bowel syndrome, obesity, diabetes and gastrointestinal hyperkinesis, the method comprising administering to said animal or human a therapeutically effective amount of a pharmaceutical composition of claim 6.

16. Currently Cancelled.

17. (Currently Amended) A process of preparing a compound of Formula I



Formula I

and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates, esters,~~ enantiomers, diastereomers, N-oxides, ~~polymorphs, prodrugs, metabolites,~~ wherein

Ar represents an aryl ~~or a heteroaryl ring having 1-2 hetero atoms selected from the group consisting of oxygen, sulphur and nitrogen atoms, the aryl or heteroaryl rings~~ which may be unsubstituted or substituted by one to three substituents independently selected from lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxy, nitro, lower alkoxy (C_1-C_4), lower perhalo alkoxy (C_1-C_4), unsubstituted amino, N-lower alkyl (C_1-C_4) amino or N-lower alkyl (C_1-C_4) amino carbonyl;

R_1 represents a hydrogen, hydroxy, hydroxymethyl, amino, alkoxy, carbamoyl or halogen (fluorine, chlorine, bromine and iodine);

R_2 represents a C_3-C_7 cycloalkyl ring in which from 1 to 4 hydrogen atoms are substituted with fluorine atoms, amides or sulphonamide derivatives;

W represents $(CH_2)_p$, where p represents 0 to 1;

X represents ~~an oxygen, sulphur, nitrogen or~~ no atom;

Y represents ~~CHR5CO wherein R5 represents hydrogen or methyl or~~ $(CH_2)_q$ wherein q represents 0 ~~to 4~~;

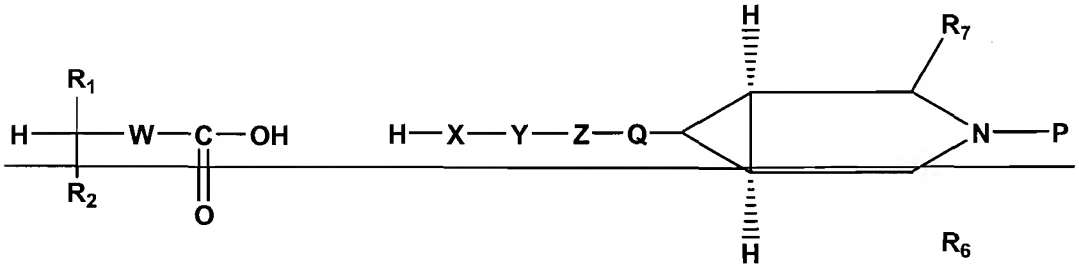
Z represents oxygen, sulphur, NR_{10}, wherein R_{10} represents hydrogen or $C_{1\text{-}6}$ alkyl;

Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4);

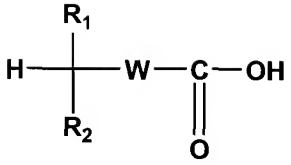
R_6 and R_7 are independently selected from H, CH_3, COOH, $CONH_2$, NH_2 or CH_2NH_2; and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from the group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4) or N-lower alkylamino carbonyl (C_1-C_4), comprising

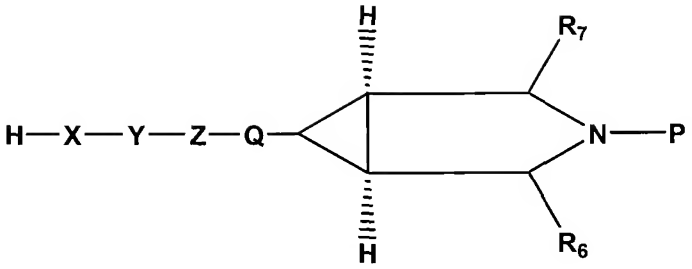
(a) condensing a compound of Formula VI with a compound of Formula V



FORMULA VI **FORMULA V**

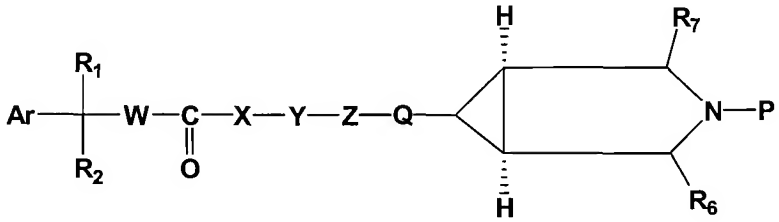


FORMULA VI



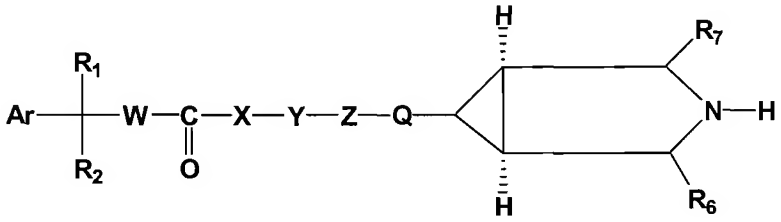
FORMULA V

wherein Ar, R_1, R_2, W, X, Y, Z, Q, R_6 and R_7 have the same meanings as defined earlier for Formula I, to give a protected compound of Formula VII wherein Ar, R_1, R_2, W, X, Y, Z, Q, R_6 and R_7 are the same as defined earlier and P is a protecting group for an amino group,



FORMULA VII

(b) deprotecting the compound of Formula VII in the presence of a deprotecting agent to give an unprotected intermediate of Formula VIII wherein Ar, R_1, R_2, W, X, Y, Z, Q, R_6 and R_7 are the same as defined earlier, and



FORMULA VIII

(c) N-alkylating or benzylating the intermediate of Formula VIII with a suitable alkylating agent or benzylating agent to give a compound of Formula I.

18. (Original) The process according to claim 17 wherein P is any protecting group for an amino group and is selected from the group consisting of benzyl or t-butyloxy carbonyl groups.

19. (Original) The process according to claim 17 wherein the reaction of a compound of Formula V with a compound of Formula VI to give a compound of Formula VII is carried out in the presence of a condensing agent which is selected from the group consisting of 1-(3-dimethylaminopropyl)-3-ethyl carbodiimide hydrochloride (EDC) and 1,8-diazabicyclo [5.4.0] undec-7-ene (DBU).

20. Previously Cancelled.

21. (Original) The process according to claim 17 wherein the reaction of a compound of Formula V with a compound of Formula VI is carried out at about 0-140°C.

22. (Original) The process according to claim 17 wherein the deprotection of a compound of Formula VII to give a compound of Formula VIII is carried out with a deprotecting agent which is selected from the group consisting of palladium on carbon, trifluoroacetic acid (TFA) and hydrochloric acid.

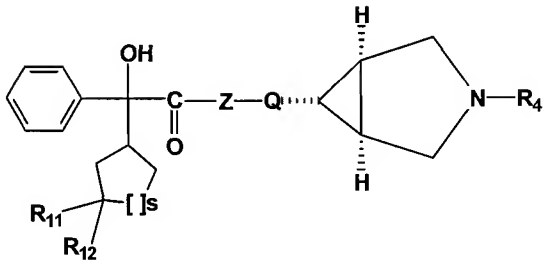
23. Previously Cancelled.

24. (Original) The process according to claim 17 wherein the N-alkylation or benzylation of a compound of Formula VIII to give a compound of Formula I is carried out with a suitable alkylating or benzylating agent, L-R_4, wherein L is any leaving group and R_4 is the same as defined earlier.

25. (Original) The process according to claim 24 wherein the leaving group is selected from the group consisting of halogen, O-mestyl and O-tosyl group.

26. Previously Cancelled.

27. (Currently Amended) A process for preparing a compound of Formula IV



FORMULA IV

and its pharmaceutically acceptable salts, pharmaceutically acceptable ~~solvates, esters,~~ enantiomers, diastereomers, N-oxides, ~~polymorphs, prodrugs or metabolites,~~ wherein

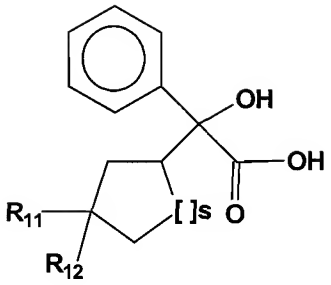
R_{11} is hydrogen or fluoro, R_{12} is fluoro, amide or sulphonamide derivatives and s represents 1 to 2;

Z represents oxygen, sulphur, NR_{10}, wherein R_{10} represents hydrogen, C_{1-6} alkyl;

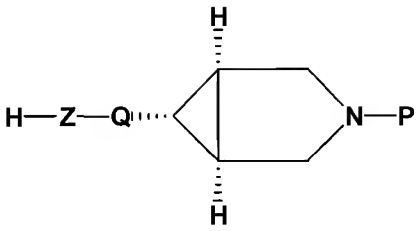
Q represents $(CH_2)_n$ wherein n represents 1 to 4, or CHR_8 wherein R_8 represents H, OH, C_{1-6}, alkyl, alkenyl, alkoxy, or CH_2CHR_9 wherein R_9 represents H, OH, lower alkyl (C_1-C_4) or lower alkoxy (C_1-C_4); and

R_4 represents a C_1-C_{15} saturated or unsaturated aliphatic hydrocarbon group in which from 1 to 6 hydrogen atoms may be substituted with the group independently selected from halogen, arylalkyl, arylalkenyl, heteroarylalkyl or heteroarylalkenyl having 1 to 2 hetero atoms selected from a group consisting of nitrogen, oxygen and sulphur atoms with an option that any 1 to 3 hydrogen atoms on the ring in said arylalkyl, arylalkenyl, hetero arylalkenyl group may be substituted with lower alkyl (C_1-C_4), lower perhalo alkyl (C_1-C_4), cyano, hydroxyl, nitro, lower alkoxycarbonyl, halogen, lower alkoxy (C_1-C_4), lower perhaloalkoxy (C_1-C_4), unsubstituted amino, N-lower alkylamino (C_1-C_4), N-lower alkylamino carbonyl (C_1-C_4), comprising

(i) condensing a compound of Formula IX with a compound of Formula X

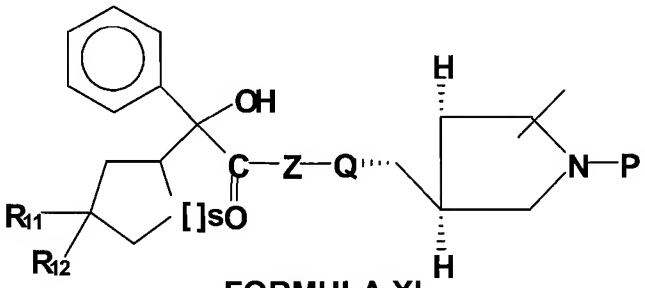


FORMULA IX



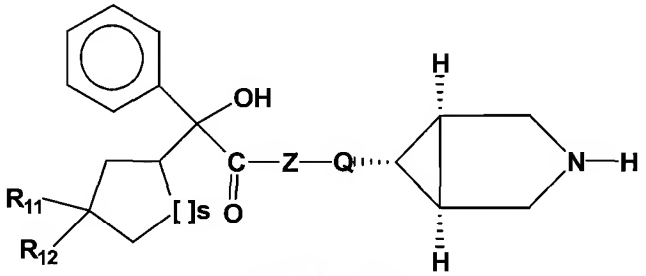
FORMULA X

where Z, Q, R_{11}, R_{12} and s have the same meanings as defined earlier for Formula IV, to give a protected compound of Formula XI,



FORMULA XI

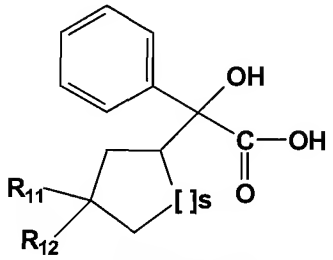
(ii) deprotecting the compound of Formula XI in the presence of a deprotecting agent to give an unprotected intermediate of Formula XII where Z, Q, R_{11}, R_{12}, s have the same meanings as defined earlier, and



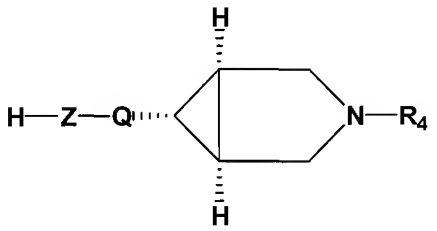
FORMULA XII

(iii) the intermediate of Formula XII is N-alkylated or benzylated with a suitable alkylating or benzylating agent to give a compound of Formula IV wherein Z, Q, R_{11}, R_{12}, and s are the same as defined earlier; or

(b) (i) condensing a compound of Formula IX with a compound of Formula XIII



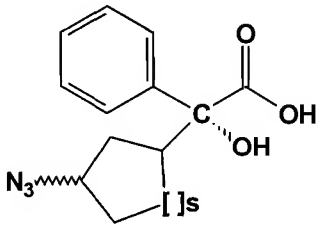
FORMULA IX



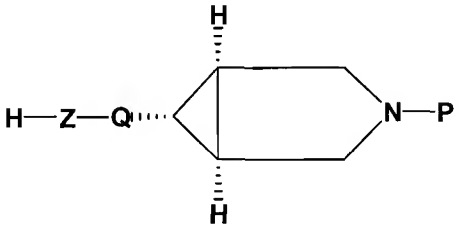
FORMULA XIII

where Z, Q, R_4 and s have the same meanings as defined earlier for Formula IV; or

(c) (i) condensing a compound of Formula XIV with a compound of Formula X

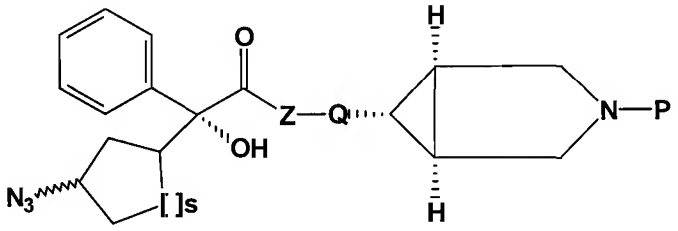


Formula XIV



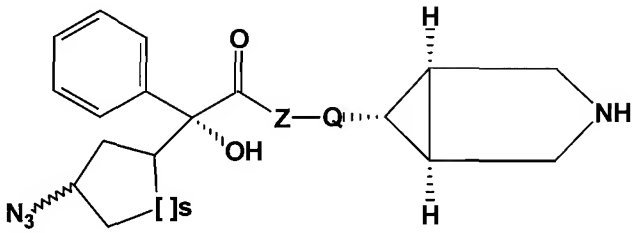
Formula X

where Z, Q and s have the same meanings as defined earlier for Formula IV, to give a protected compound of Formula XV,



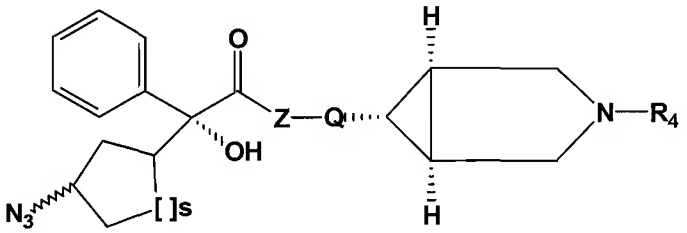
Formula XV

(ii) deprotecting the compound of Formula XV in the presence of a deprotecting agent to give an unprotected intermediate of Formula XVI, wherein Z, Q and s have the same meanings as defined earlier,



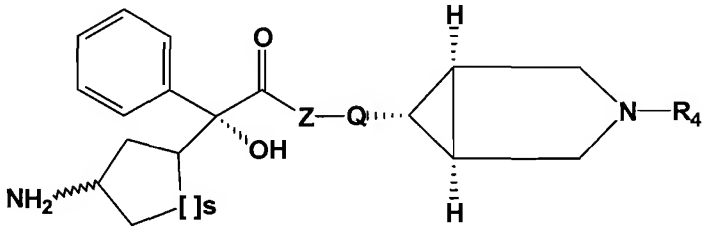
Formula XVI

(iii) N-alkylating or benzylating the intermediate of Formula XVI with a suitable alkylating or benzylating agent to give a compound of Formula XVI, wherein Z, Q, R_4 and s are the same as defined earlier,



Formula XVII

(iv) reducing the compound of Formula XVII to give a compound of Formula XVII, wherein Z, Q, R_4 and s have the same meanings as defined earlier, and



Formula XVIII

(v) reacting a compound of Formula XVIII with acid chlorides to give a compound of Formula IV (R_{11}=H, R_{12}= substituted sulfonamide).

28. (Original) The process according to claim 27 wherein P is a protecting group for an amino group and is selected from the group consisting of benzyl or t-butoxy carbonyl groups.

29. (Previously Amended) The process according to claim 27 wherein the reaction of a compound of Formula IX with a compound of Formula X to give a compound of Formula XI, the reaction of a compound of Formula XIII with a compound of Formula IX or the reaction of a compound of Formula XIV with a compound of Formula X is carried out in the presence of a condensing agent which is selected from the group consisting of 1-(3-dimethyl aminopropyl)-3-ethyl-carbodiimide hydrochloride (EDC) and 1,8-diazabicyclo [5.4.0] undec-7-ene (DBU).

30. Previously Cancelled.

31. (Previously Amended) The process according to claim 27 wherein the reaction of a compound of Formula IX with a compound of Formula X, the reaction of a compound of Formula XIII with a compound of Formula IX or the reaction of a compound of Formula XIV with a compound of Formula X is carried out at about 0-140°C.

32. (Previously Amended) The process according to claim 27 wherein the deprotection of a compound of Formula XI to give a compound of Formula XII or the deprotection of a compound of Formula V to give a compound of Formula XVI is carried out with a deprotecting agent which is selected from the group consisting of palladium on carbon, trifluoroacetic acid (TFA) and hydrochloric acid.

33. Previously Cancelled.

34. (Previously Amended) The process according to claim 27 wherein the N-alkylation or benzylation of a compound of Formula XII to give a compound of Formula IV or the N-alkylation or benzylation of a compound of Formula XVI to give a compound of

Formula XVII is carried out with a suitable alkylating or benzylating agent, L-R_4, wherein L is any leaving group and R_4 is the same as defined earlier.

35. (Original) The process according to claim 34 wherein the leaving group is selected from the group consisting of halogen, O-mestyl and O-tosyl group.

36. Previously Cancelled.

37. Previously Cancelled.

38. Previously Cancelled.

39. Previously Cancelled.

40. Previously Cancelled.

41. Previously Cancelled.

42. Previously Cancelled.

43. Previously Cancelled.

44. Previously Cancelled.

45. Previously Cancelled.

46. Previously Cancelled.

47. Previously Cancelled.

48. Previously Cancelled.

49. Previously Cancelled.

50. Previously Cancelled.

51. (Previously Amended) The process according to claim 27 wherein the reduction of a compound of Formula XVII to give a compound of Formula XVIII is carried out with triphenylphosphine.

52. Previously Cancelled.

53. (Previously Amended) The process according to claim 27 wherein the acid chlorides used in the reaction of a compound of Formula XVIII with acid chlorides is selected from the group consisting of phenylacetyl chloride, 4-nitrophenylsulfonyl chloride, benzene sulfonyl chloride, benzyloxyacetyl chloride, 4-methoxyphenylsulfonyl chloride and 4-bromophenylsulfonyl chloride.

54. Previously Cancelled.